

The Official Newsletter of the

# PAPAKURA RADIO CLUB INC.





Because no prank, can be as messed up as this decade is turning out to be!





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### This Month's Meetings:

Wednesday 7 April will be our general meeting at the clubrooms

### **Meetings for March.**

Meetings will only occur at alert level 2 or lower. We cannot have social meetings at level 3. This means we will only open the clubrooms on Wednesdays when at we at alert levels 1 or 2 in accordance with current government guidelines.

Wed 7 April – General Meeting & SWR what does it really mean? by ZL1BNQ Wed 14 April – Activity Night Wed 21 April – Committee Meeting Wed 28 April – Project Night

### CLUB ACTIVITY:

Hopefully we will be returning to a more normal month this april, and hope to have weekly activities.

We hope to upgrade the

### **UPCOMING PROJECTS:**

### PROJECT AND ACTIVITY NIGHTS

We have completed the series on using the Nano-VNA, but I see Ian has been playing with Mesh, so this might be a fun project.

We will also, later, be building some satellite antenna designs for working off the ISS or other satellites. Also an updated version of the flower pot Portable VFH/UHF ground independent dual band antenna



We will be building some HF antennas for Drury, and planning some long wire 5 band antennas for Home Stealth use over upcoming project nights, these will include some experimental stealth and portable designs suitable for AREC, SOTA or POTA type activities, as well as general field or Home use.

And we have a DC power distribution project, in the pipeline. - So a busy year

### **UPCOMING ACTIVITIES:**

(LEVELS PERMITTING) WEDNESDAY 7 APRIL – GENERAL MEETING WEDNESDAY 14 APRIL – ACTIVITY NIGHT WEDNESDAY 21 APRIL – COMMITTEE MEETING WEDNESDAY 28 APRIL – PROJECT NIGHT

### PLEASE LISTEN FOR UPDATES ON THE SUNDAY MORNING CLUB NETS (SEE LAST PAGE FOR FREQUENCIES AND TIMES)

### DX Calendar March 2021



### **RI01ANT Antarctica**

Alex, RI01ANT will be active from Progress Station till 24 March 2021. Then he will go to Novolazarevskaya Base and Bellingshausen Base. Bellingshausen Base located on King George Island, South Shetland Islands. He will operate on HF Bands.

#### JW/LB2PG Bear Island

Erling, JW/LB2PG will be active again from Bear Island, IOTA EU - 027, until 1 June 2021. He will operate on 80 - 20m

#### **3W9OK Vietnam**

Brian, AA5H will be active as 3W9OK from Vietnam in March - April 2021. He will operate on HF Bands.



### JG8NQJ/JD1 Marcus Island Minami Tori Shima Islands

Take, JG8NQJ will be active again as JG8NQJ/JD1 from Marcus Island, IOTA OC - 073, Minami Torishima, during 3 month, starting 10 March 2021. He will operate on HF Bands CW.

Click on the link (CTRL + Click for some PDF readers) in the PDF versions for information on the Expeditions



Or check them out at DX News.com

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### **CONTESTS APRIL 2021**

Det	Start -	Fini	sh	Danda	Contact Name	Mada	Fuchanas	
Dat	e-IIme	e Dai	e-lime	Bands	Contest Name	wode	Exchange	Sponsor's Website
1	1700	1	2000	3.5	SARL 80-Meter QSO Party	Ph	RS, serial, grid locator	www.sarl.org.za
1	1800	1	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrrlcontest.no
1	1900	1	2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
2	2000	2	2100	1.8-14	K1USN Slow Speed Test	CW	20 WPM max. Name, SPC	k1usn.com/sst.html
3	1000	4	0400	14	PODXS 070 Club PSK 31 Flavors Test	Dig	SPC, mbr or name	www.podxs070.com
3	1400	4	0200	1.8-144	Louisiana QSO Party	CW Dig Ph	RS(T), LA Parish or SPC	lagp.louisianacontestclub.org
3	1400	4	0200	1.8-144	Mississippi QSO Party	CW Ph Dig	RS(T), MS county or SPC	www.arrlmiss.org
3	1400	4	2200	3.5-28	Florida State Parks on the Air	CW Ph Dig	Park ID or SPC	fispota.org/rules
3	1500	4	1500	1.8-28	SP DX Contest	CW Ph	RS(1), SPC province or serial	spaxcontest.pzk.org.pl
3	1600	4	1600	3.5-28	EARITY Contest	Dig	RSQ, EA province or serial	concursos.ure.es/en
4	1500	4	1720	3.5-14	North American SSB Sprint Contest	Pn CW/Dh	Other's call, your call, serial, name, SPC	sspsprint.com/rules
4	1500	4	1730	3.3,7	DARC Easier Contest	CWPh	RS(T), DOK of serial	www.darc.de
5	1900	5	2300	144	144 MHz Spring Sprint	CW Ph Dig	4-char grid square	sites.google.com/site/
6	0100	6	0150	1 8 50	Worldwide Sideband Activity Test	Dh	PS age group (OM VL or Youth)	springvinupsprints
6	0100	6	0109	3.5-28	ARS Spartan Sprint	CW	RST SPC power	arsarp blogspot com
6	1700	6	1000	3.5.14	RTTVors Weeksprint	Dig	Other's call your call serial name	rttyops wordpross com
7	1300	7	1/100	1.8-28	CWops Mini-CWT Test	CW	Name mbr or SPC	cwops org/cwops-tests
7	1700	7	2000	144	VHE LIHE ET8 Activity Contest	Dig	A char grid square	ft8activity ou/indox php/op
7	1000	7	2000	1 8 28	CWops Mini CWT Test	CW	Name mbr or SPC	cwops org/cwops_tosts
7	1000	7	2000	3.5	PSCB ET4 Contest Series	Dig	A char grid square	www.rsabcc.org/bf
7	2000	7	2100	3.5	LIKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.nhp
8	0300	8	0400	1 8 28	CWope Mini CWT Test	CW	Name mbr or SPC	cwops org/cwops_tosts
10	0000	10	0600	1.0-20	OPP APCI Spring OSO Party	CW	PS SPC mbr or power	grparci org/contost
10	0700	11	1300	1.0-20	IDX CW Contest	CW	PST IA prefecture or CO zone	iidy org/iidyrulo-o html
10	1200	11	1200	1.0-20	OK/OM DX Contest SSB	Dh	PS county code or serial	okomdy crk cz
10	1200	11	1200	3.5.28	ETn DX Contest	Dig	PST state or province or serial	ouropoanft8club wordpross.com
10	1200	11	1200	3.5-28	IG-RY World Wide RTTY Contest	Dig	RST 4-digit year first licensed	igry webs com/ig-ry-ww-contest
10	1200	11	2350	1.8.50	SKCC Weekend Sprintathon	CW	PST SPC name mbr or "none"	igry.webs.com/igry-ww-comest
10	1200	11	2200	1.0-30	Nebraska OSO Party	CW Ph	County or SPC (or grid for ET8)	www.skccgroup.com
10	1/100	11	0200	1.8-1//	New Mexico OSO Party	CW Ph Dig	Name NM county or SPC	newmeyicogsoparty.org
10	1600	11	0400	1 8 28	Georgia OSO Party	CW Ph	RST CA county or SPC	dagsoparty.com
10	1800	11	1800	1 8 1//	North Dakota OSO Party	CW Ph	PS(T) ND county or SPC	ndarrisoc.com
10	2100	11	2100	1.8-28	Yuri Gagarin International DX Contest	CW	RST ITU zone	ac ast ru/en/section/32
11	1000	11	2100	3.5-14	WAB 3 5/7/1/ MHz Data Modes	Dig	RS serial WAB square or country	wab intermin net
11	1200	12	1100	3 5-28	DIG OSO Party CW	CW	RST mbr or "none"	diplom-interessen-gruppe info
11	1500	11	1600	3.5	Hungarian Straight Key Contest	CW	RST serial power	hekc ha8kux com
11	1900	11	2030	3.5	RSGB Rol o SSB	Ph	RS 6-char grid of previous OSO	www.rsabcc.org/hf
12	0000	12	0200	1.8-28	4 States ORP Second Sunday Sprint	CW Ph	RS(T) SPC mbr or power	www.4sgrp.com
12		12	0200	1.0 20	RSGB 80-Meter Club			in the complete in the
12	1900	12	2030	3.5	Championship CW	CW	RST, serial	www.rsgbcc.org/hf
14	0030	14	0230	3 5-14	NAOCC CW Sprint	CW	RST SPC mbr or power	nagec info
14	1700	14	2000	432	VHF-UHF FT8 Activity Contest	Dia	4-char grid square	ft8activity eu/index php/en
16	2100	17	2100	1 8-28	Holyland DX Contest	CW Ph Dig	RS(T) 4X area or serial	jarc org/jarc/#HolylandContest
17	0500	17	0859	357	ES Open HE Championship	CW Ph	RS(T) serial	www.erau.ee/en
17	0600	18	0559	3 5-28	Worked All Provinces of China	CW Ph	RS(T) province or serial	www.mulandxc.com
17	0700	18	0659	3 5-28	YUDX Contest	CW Ph	RS(T) YU county or serial	vudx.vu1srs.org.rs
17	0900	18	2359	3 5-28	COMM DX Contest	CW	RST continent	www.cammdx.com
17	1400	18	2000	All	Texas State Parks on the Air	CW Ph Dig	RS(T), TX park or SPC	www.tspota.org
17	1600	18	0400	3.5-28	Michigan QSO Party	CW Ph	Serial, MI county or SPC	migp.org/Rules.htm
17	1700	18	1200	3.5-28	EA-QRP CW Contest	CW	RST. category code	www.eagrp.com
17	1800	17	2159	1.8-50	Feld Hell Sprint	Dia	RST. mbr. SPC. grid	sites.google.com/site/feldhellclub
17	1800	18	1800	1.8-144	Ontario QSO Party	CW Ph	RS(T). ON county or SPC	www.va3cco.com
18	1800	18	2359	3.5-28	ARRL Rookie Roundup, SSB	Ph	Name, 2-digit year licensed, SPC	www.arrl.org/rookie-roundup
18	2300	19	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	grpcontest.com/pigrun
04	1000	04	2022	0.5	RSGB 80-Meter Club	Di	DQ control	
21	1900	21	2030	3.5	Championship, SSB	Ph	RS, serial	www.rsgbcc.org/nf
0.4	0004	05	0050		10-10 International Spring	D.	N	
24	0001	25	2359	28	Contest. Digital	Dig	Name, mpr or "0," SPC	www.ten-ten.org
24	0800	24	1800	3.5-21	QRP to the Field	CW Ph	RST, SPC, name or SOTA ID	www.zianet.com/grp
24	1300	25	1259	1.8-28	Helvetia Contest	CW Ph Dia	RS(T), HB canton or serial	www.uska.ch/contest
24	1600	25	2159	7-28	Florida QSO Partv	CW Ph	RS(T), FL county or SPC	floridagsoparty.org/rules
25	1200	25	1800	3.5.7	International Vintage Contest HF	CW Ph	RS(T), 6-char grid square	contestvintage.beepworld.it
25	1700	25	2059	3.5-28	BARTG Sprint 75	Dia	Serial	bartg.org.uk/wp
28	0000	28	0200	1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccaroup.com
28	2000	28	2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
20	1000	00	2022	2.5	RSGB 80-Meter Club	Dis		
29	1900	29	2030	5.5	Championship, Data	Dig	ROT, Selial	www.rsgbcc.org/ff

All dates and Times are in UTC and are not adjusted for local time

Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state.

Listings in blue indicate contests sponsored by ARRL or *NCJ*. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at **www.contestcalendar.com** 

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

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### CHANGING CLOCKS - A GUIDE:

Since the 4<sup>th</sup> of April is the end of daylight savings and our clocks go back one hour, (I get my hours extra sleep back) I thought I would provide a simple guide to getting all the clocks in your house set up for real time, not daylight savings time:

### 1. The Smartphone:



Do nothing. Smartphones operate on a level of reality different from the normal world, Due to the rainbows hues on the back (which include all the normal 7 colours, plus the colour of magic)

They will change time by pure magic

And it is very unwise to mess with magic.

#### 2. The Sundial

Should you be fortunate enough to have one of these energy efficient marvels, the trick will depend upon what you did last year to change the time.

Normally however this involves moving to a new house, so it's not for the faint hearted.

Resist the urge to twist them, as this only messes with the fundamental nature of the universe.



### 3. A Digital Clock on an electric stove



While possible, this is very tricky. In order to perform this task, you will require at least a master's degree in electrical engineering, patience, and a large sound proof bag to swear into.

Alternatives are to use a large hammer, or a child approximately 8 years old, who seem to have an uncanny knack of inter-causality special quantum theory

4. The radio in your car

Forget it – Its just not worth the fuss. You must be mad to even consider it

Wait six months



### Enjoy the end of Daylight Savings (and the sleep in)

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### **RAMBLINGS FROM THE EDITORS DESK**

As we start into the second quarter of the year, I hope all of us are able to stop and take a much-needed breath. What a start 2021 has manager to deliver

I have, like many, decided that April fool's day this year should be cancelled, as no prank conceived by a human is able to match the weirdness of the year to date. Nevertheless I'm sure that pranks will be played, and I hope we find enough humour left within to receive these in good spirits



On the radio front, we have managed to learn the VNA, May thanks to Ian ZL1IRC for facilitating this, and I'm sure that many of you will have taken the opportunity to play with this newfound knowledge. Play is, after all, a form of learning not limited to children and one that fits well into our hobby.

As I write this, I have no cell phone coverage, and no repeater access, it's strange to think that in such a small country we still have areas where life takes on a different pace, and facebook, twitter and tik-toks don't dominate the conversation, instead farming, fishing and human interaction (interrupted by the odd tv show) tend to have a higher value, and of course, our simplex comms skills allow us to keep in touch.

Hopefully, I'll soon have the HF up and running, and am hoping the grey-line will provide some nice contacts. Yes we are campervanning, and Ann-Maree & Timothy are being given trout fishing lessons, which may mean trout dinners later tonight.

In addition to the gravel roads, the thick morning fog filling the valleys and lack of cell phone coverage, the moment it really hit me as to how far out we had travelled was to see the SWER (single wire earth return) mains supply system to the farm. So armed with my camera, I have documented the build from every angle, and I'm sure the local farmer thinks I'm mad, but I have some new stock photos for use in electrical courses. I felt like a ham running a valve rig, rather than an SDR, just to prove you could. Not better, not worse, just different, But how nice to take a break from the normal noisy intrusions of the day, and a pleasant distraction from writing about IP Networking.

Watching as three newbie fisherfolk were taught the basics of casting, how to put the line into the spot of water you choose to place the fly, was reminded of the many different things we have learnt about radio, event comms, AREC, HF and VHF antennas, and again I am reminded that these skills are leant, sometimes taught, sometimes stumbled onto, sometimes unfamiliar ... but like so many skills, having a mentor or guide can make the journey so much easier, and once we understand the how and why of a skill, we, and those with us, enjoy the experience a little more.



Learning is not easy, and can even involve pain, as we find out we still don't understand it, but in the long term, skills expand our horizons and make us better. Most of us can think of a teacher, or tutor, or mentor who walked us through our own learning journey, and without their support we would probably not be who we are now.



As a club we rely on all of us to share our journey and experience (or lack of it) with each other, and as we do we become the mentors, guides or perhaps fellow learners on the journey. We don't have to have a big story of success, or huge experience, we don't need to be gifted orators or qualified teachers to share a story or trick, in fact a lot of learning comes from a fellow learner, as they can often express it in a way we can understand, and with the constant changes in technology and information, not to mention, the changing world we see each day, who of us can honestly say we have nothing left to learn.

One of the goals for this year is to have a speaker at every general meeting, and if the alert levels change, an on-line presentation. This means we need speakers to share stories of the journey, They don't have to be great masterpieces, or lots of pictures or video, just real stories of what we are playing with and what happened as a result (Things that did not go right, can even be more entertaining), so I want to challenge each of you to think about the possibility putting your hand up, and sharing a story of something you have enjoyed, or learnt about on your journey. Alternatively, is there a new ham, there have a few lately on the repeater network, that you can encourage or support in some small way to take steps on the journey, a small investment of time out of a busy life, can lighten the burden of another and give then the confidence to try some small new thing that opens the door to a new world.

How will you make a difference to someone?

The story is told of an old man who was walking a beach following storm and saw that the storm had washed starfish onto the beach, so he began picking them up, and throwing them back into the sea, before the sun dried them out, and they became seagull food. A younger person saw him, and explained to him, that it was pointless, after all there were so many ... the beach was too large ... it was just a waste of his time. Yet in spite of this, the old man just kept throwing the starfish out, one by one. Again, the youth chided him, did he not hear? Did he not understand? Finally, as he threw out yet another starfish, the old man looked up and said ... Well. It made a difference to that one.

We do not have to do big things, we just have to do what we can, little things can make a difference to one person, and that is one more than if we did nothing.



Footnote:

While I did get the HF up, and even managed a few QSO's and some limited net contributions, I did not remember that the CQ WW WPX Contest was on that weekend, so the bands were full of very short RST and serial swaps.

Since the ISS is again operational., Maybe next time I will have a field satellite station to try out.

We did not get the fish dinner, but a good time was still had. But one fish was landed, and we enjoyed a little smoked trout anyway.

Maybe Next Time.

Hope to see you at the meetings, and hope to hear some of your stories, 73 until then.



Cloud Connected – The easy way

This is brilliant. Not sure who the photographer is. "Stealing the sun"



### NANO-VNA PART 3- CONTROLLING THE VNA - FREQUENCY SETTING TIPS

Stimulus

Carrying on from last month, I often use my VNA in the field, so I rely a lot on using the internal menus, and operating it from the touch screen. Throughout this guide, I will assume you are using a stylus (or your finger) to control the Nano-VNA via the touch-screen. You can of course use the rocker control to perform all these applications, but it's so much harder. Any item of plastic (not too hard) can be used to make a stylus, I have the end of an old (big) knitting needle and a 3D printed one in my 3D printed housing, both work fine, and are more precise than my "Fat" Fingers

Last month we looked at the display features, and this month I plan to focus on the stimulus mode, and some final tricks that allow us to customise the frequency.

While the VNA is capable of powerful broad sweeps, sometimes it is nice to be able to look a performance in just a small part of the band, or even just a small range of frequencies. Stimulus is the VNA name for the sweep generator and allows to control the portion of the band we sweep.

There are 4 main stimulus features to consider.

#### Start, Stop, Centre and Span.

But there is also a hidden menu here that allows for very precise adjustment of the screen and it's not available in from the menu.

To access the sweep generator we start, as always at the main menu.

#### **To select Stimulus**

Turn on the VNA and the default full span sweep will be displayed.

At the bottom you will see the start freq 50.0 KHz and stop of 900MHz

(Each model will vary slightly)

Enter the **Stimulus** menu. (Tap the top left of the screen)

Now select the Centre menu.

	V LOGHRG 10dB/ 0.	00dB 1:50,000kHz	
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#### **Set Centre Frequency**

The centre frequency can be adjusted either with the wheel (the red number is the incremented or decremented number or to make life easier tap just to the right of the last number and a hidden menu will be revealed.

#### **Set Frequency**

Type in the frequency in the format xxx.xx and select x1 for Hz, K for Kilohertz, M for Megahertz or G for Ghz (if your hardware supports it.)

For example, The middle of the 2 metre band would be 146.0 "M" for a centre frequency of 146.0Mhz

When the M is pressed, the menu disappears. note the centre freq has changed to 146.0 MHz

Now we can set the span. For 2 metres the span could be +/- 2MHz, but this would be very barrow, so I prefer a wider span, such as 10, 20 or even 50 for antenna spans

The process is the same, select Span, and enter the data ( in the image to the right it is 10Mhz) and it will display half (5MHz) either side of the centre

For more precise measurements, Start and stop may be easier, as you can set a very specific sweep range, or if you wish a single frequency only (e.g. trimming a rejection filter) the CW mode will give you this.

This hidden menu made my life so much easier in the field, Hope it's as helpful for you

Now, Go play and maybe you'll find some other tricks too









### IS IT TIME FOR A DIGITAL COMPETENCY TEST, AS PART OF A HAM LICENSE?

As the national system starts to come alive with the sounds of Morse code, many older operators have been quick to point out that the removal of the morse test as part of the General Users Radio Licence (GURL) potentially dumbed downed the quality of operators, but a new digital competency test may be included in the next revision of the examination process.

A new discussion document from the radio licensing group, may be set to bring operating into the 21<sup>st</sup> century. The proposal to include a digital competency test as part of the requirements for obtaining a GURL is one of three proposals in the document. The Digital Mode competency test would require new hams to demonstrate the ability to exchange a digital QSO over no more than 3 minutes. The timing was derived based on the standard FT8 QSO requires a 15 second burst for each station, so assuming 4 bust transmissions from each side for call, exchange, acknowledgement and final cleardown would take approx. 2 minutes for a skilled operator, allowing 1 re-transmission would make a normal QSO 2.5 minutes. As these operators will take longer, and to make the test possible, the 3-minute time window has been proposed.

Naturally, with newer turbo modes, and higher technical skills, some operators may in fact operate much faster, and those that can complete the exchange in under 2 minutes. If this "Advanced" standard of operating is achieved in the test, the proposal includes the option for an operator to be permitted to operate on more bands in digital modes, without the traditional 3 month and 50 contact requirements.

The discussion which started with the USA Regulator the FCC, as part of the "Make Ham Radio Great Again" programme, has passed an initial evaluation by the ITU(R), who have sought comment from other regulators worldwide.

The FCC initial proposal followed a series of public consultations aimed at "making Ham Radio great again", where the FCC had asked amateur radio clubs and organisations how to improve the Amateur Radio Service. One of the more popular answers were related to bringing back the practical CW skills requirement, but after looking at actual amateur radio bands usage officials decided FT8 will be the most important skill for the next generation of hams.

In the USA the test will apply to all future examinations for Tech, General or Extra classes. Extra class license holders as well as current holders of vanity call signs will have to take the FT8 proficiency test periodically to ensure the level of competence necessary to operate in the amateur radio bands.

The NZ response has been to create an all of government discussion group to be created to form a working group to discuss the relevant impacts. The working group will be formed by late 2021, and will hope to consult with Iwi, Regional Councils and Environmental groups, as well as Trade Unions, during 2022, to determine what the NZ response might be. When asked if NZART or Ham Radio operators might be allowed to attend, the committee chair Dr Kahore Pūihi stated that the emotional attachment of such groups would make it difficult to get the feelings of a true representation of all New Zealanders. So while they will not be involved in the early consultations, there will be a series of public meetings once the initial response had been determined where they could express their views.

The proposal also includes other significant changes, like lowering spurious emissions requirements for imported handhelds that cost less than US\$35 (already included in the new China Free Trade Agreement) and introducing fines for inaccurate RST reports.

And yes, if you still haven't caught on. Just use Google translate on Kahore Pūihi.

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### SOME NOTICE BOARD TYPOS, OR GRAMMAR ERROR FOR A SMILE ...

# Church bulletin board

### The following appeared in church bulletins or were announced at church services.

The sermon this morning: 'Jesus Walks on the Water.' The sermon tonight: 'Searching for Jesus.'

Ladies, don't forget the rummage sale. It's a chance to get rid of those things not worth keeping around the house. Bring your husbands.

> Don't let worry kill you off let the Church help.

> > 20000

00000

### Miss Charlene Mason sang 'I will not pass this way again', giving obvious pleasure to the congregation.

For those of you who have children and don't know it, we have a nursery downstairs.

00000

#### 60000

The Rector will preach his farewell message, after which the choir will sing 'Break Forth Into Joy'.

#### 00000

Irving Benson and Jessie Carter were married on October 24 in the church. So ends a friendship that began in their school days.

Potluck supper Sunday at 5pm – prayer and medication to follow.

The church will host an evening of fine dining, super entertainment and gracious hostility.

00000

At the evening service tonight, the sermon topic will be 'What is Hell?' Come early and listen to our choir practice.

#### LOON

The ladies of the Church have cast off clothing of every kind. They may be seen in the basement on Friday afternoon.

#### coords

This evening at 7pm there will be hymn singing in the park across from the Church. Bring a blanket and come prepared to sin.

#### cooge

Low Self-Esteem Support Group will meet Thursday at 7pm. Please use the back door.

#### 0000

The Associate Minister unveiled the church's new tithing campaign slogan last Sunday: 'I Upped My Pledge – Up Yours.'

This being Easter Sunday, we will ask Mrs Lewis to come forward and lay an egg on the altar.

Compiled by Max Bowen

All of these have been harvested from actual church notices

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### GEEKY RADIO NEWS

### ATOMIC CLOCKS TAKE A STEP TOWARD REDEFINING THE SECOND

A new measurement moves scientists closer to revamping how we keep time.

After scientists redefined the unit of mass, the kilogram, in 2019, they set their sights on overhauling the fundamental unit of time, the second. Now, comparisons between three atomic clocks mark an important step toward that goal.



Since the 1960s, the second has been defined by atomic clocks made of cesium atoms, which absorb and emit light at a particular frequency that determines the length of a second. But improved timepieces called optical atomic could be used to define more precisely the second.

But first, scientists must ensure they fully understand the new clocks, for example by comparing the frequencies of light from different timepieces. Now, scientists with the Boulder Atomic Clock Optical Network, or BACON, have made such comparisons, measuring the ratios of frequencies of three atomic clocks, one made of ytterbium atoms, one of strontium atoms and one made with a single electrically charged aluminum atom. The results are the most precise clock comparisons yet, with uncertainties less than a quadrillionth of a percent, the researchers report in the March 25 *Nature*.

Because the three clocks were in different locations — two at NIST and the other 1.5 kilometers away at the research institute JILA — the team compared the clocks by sending information across an optical fiber and through an open-air link. This ability to compare distant optical atomic clocks is a step toward clock networks that could be used to make precise measurements such as characterizing Earth's gravity and testing fundamental physics.

And no, This is not an April Fools Joke

1960 -

# A SOFT ROBOT WITHSTANDS CRUSHING PRESSURES AT THE OCEAN'S GREATEST DEPTHS

Inspired by a strange fish that can withstand the punishing pressures of the deepest reaches of the ocean, scientists have devised a soft autonomous robot capable of keeping its fins flapping — even in the deepest part of the Mariana Trench.

The team, led by roboticist Guorui Li of Zhejiang University in Hangzhou, China, successfully field-tested the robot's ability to swim at depths ranging from 70 meters to nearly 11,000 meters, it reports March 4 in *Nature*.



Challenger Deep is the lowest of the low, the deepest part of the Mariana Trench. It bottoms out at about 10,900 meters below sea level. The pressure from all that overlying water is about a thousand times the atmospheric pressure at sea level, translating to about 103 million pascals (or 15,000 pounds per square inch). This is a pressure similar to what you would expect if an elephant was to put all it weight on your thumb

The tremendous pressures at these hadal depths — the deepest ocean zone, between 6,000 and 11,000 meters — present a tough engineering challenge. Traditional deep-sea robots or manned submersibles are heavily reinforced with rigid metal frames so as not to crumple — but these vessels are bulky and cumbersome, and the risk of structural failure remains high.

To design robots that can maneuver gracefully through shallower waters, scientists have previously looked to soft-bodied ocean creatures, such as the octopus, for inspiration. As it happens, such a deep-sea muse also exists: *Pseudoliparis swirei*, or the Mariana hadal snailfish, a mostly squishy, translucent fish that lives as much as 8,000 meters deep in the Mariana Trench.



The team also designed a soft body that slightly resembles the snailfish, with two fins that the robot can use to propel itself through the water. To flap the fins, the robot is equipped with batteries that power artificial muscles: electrodes sandwiched between two membranes that deform in response to the electrical charge.

The team tested the robot in several environments: 70 meters deep in a lake; about 3,200 meters deep in the South China Sea; and finally, at the very bottom of the ocean. The robot was allowed to swim freely in the first two trials. For the Challenger Deep trial, however, the researchers kept a tight grip, using the extendable arm of a deep-sea lander to hold the robot while it flapped its fins.

This machine "pushes the boundaries of what can be achieved" with biologically inspired soft robots, write robotocists Cecilia Laschi of the National University of Singapore and Marcello Calisti of the University of Lincoln in England. The pair have a commentary on the research in the same issue of *Nature*. That said, the machine is still a long way from deployment, they note. It swims more slowly than other underwater robots, and doesn't yet have the power to withstand powerful underwater currents. But it "lays the foundations" for future such robots to help answer lingering questions about these mysterious reaches of the ocean.

# ZOMBIE' GENES? RESEARCH SHOWS SOME GENES COME TO LIFE IN THE BRAIN AFTER DEATH



In the hours after we die, certain cells in the human brain are still active. Some cells even increase their activity and grow to gargantuan proportions, according to new research from the University of Illinois Chicago.

In a newly published study in the journal *Scientific Reports*, the UIC researchers analyzed gene expression in fresh brain tissue -- which was collected during routine brain surgery -- at multiple times after removal to simulate the post-mortem interval and death. They found that gene expression in some cells actually increased after death.

These 'zombie genes' -- those that increased expression after the post-mortem interval -- were specific to one type of cell: inflammatory cells called glial cells. The researchers observed that glial cells grow and sprout long arm-like appendages for many hours after death.

"That glial cells enlarge after death isn't too surprising given that they are inflammatory and their job is to clean things up after brain injuries like oxygen deprivation or stroke," said Dr. Jeffrey Loeb, the John S. Garvin Professor and head of neurology and rehabilitation at the UIC College of Medicine and corresponding author on the paper.

What's significant, Loeb said, is the implications of this discovery -- most research studies that use postmortem human brain tissues to find treatments and potential cures for disorders such as autism, schizophrenia and Alzheimer's disease, do not account for the post-mortem gene expression or cell activity.

"Most studies assume that everything in the brain stops when the heart stops beating, but this is not so," Loeb said. "Our findings will be needed to interpret research on human brain tissues. We just haven't quantified these changes until now."

So Yes, There is still hope for the Zombie Apocalypse

### SEEN OR HEARD AROUND THE SCENES

## ISS APRS BEACON IS ON-LINE – LOOKS LIKE THE RADIO STATION POWER IS RESTORED.

https://www.reddit.com/r/amateurradio/comments/meyt2c/re ceived aprs beacon from the iss for the first/

Interesting reading, the ISS has a new, reliable radio.

Looks like we can hear the beacon with any radio that can tune to the frequency, which could probably be any Baofeng or similar.

If anything can transmit APRS, even with a simple antenna, the ISS will work as a repeater.

I've never done anything with APRS but expect that an antennae / SDR / laptop combination should be able to receive it with suitable software. Just need someone with a radio that can transmit it.

As for when the ISS flies overhead, I track this for the next 3 days -

<u>https://kiwiweather.com/index.php/predictions/</u>. I can easily update this to be a week or more in advance. Of course it is hard to arrange for this to be on a club project night.

de ZL1MDE

### **CONFERENCE 2021**

The upcoming conference and AGM will be held in Napier at Queens Birthday weekend in 2021, Mark calendar now to prevent double bookings – *It is recommended to book accommodation first, as it seems like it might already be in short supply.* 

### NEW SWR GREASE ACTUALLY WORKS.

This incredible product, which contains hygroscopic grease mixed with carbonyl iron & ferrite as well as Jaumann absorber is guaranteed to reduce the SWR of any antenna to a perfect 1:1.

While it works best when applied directly to the antenna connection, It can also be injected into the centre of hollow tube antennas, and some have reported great success with fibreglass covered antenna, but higher quantities have been required.

This state of the art material has been used in the military in RAM applications for many years, but has only just become available for general use.

*Note:* this is not guaranteed to improve antenna performance but will reduce the SWR to ensure a perfect match.

Pa	pakura Radio Club Inc.	Page 18	April 2021	
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### EQUIPMENT SALES

### **RADIO ELECTRONICS GROUP INC ANNUAL EQUIPMENT SALE**

At Glenview Club Inc. 211 Peacocks Road Glenview, Hamilton

- Saturday 15th May 2021
- Vendors: 8-30am
- Doors open 10am
- Tables \$20
- Public \$2 Lucky Ticket Entry
- Trade display Refreshments Door prizes
- Plenty of parking
- Easy access
- Motor Home Parking

For Vendor registration and enquires Contact Vern ZL1TKG ZL1REGSALE@gmail.com

Or Phone John ZL1PO 021 204 5990

**Radio Electronics Group** 

### RADIO AND COLLECTABLES AUCTION STOKE, NELSON SATURDAY 10 APRIL, 2021

AUCTION STARTS AT 11am Viewing from 9am

A large collection of approximately 400 radios plus cases, parts etc and other collectables Looks like receivers not transmitters ... But what a collection

For details check out: <a href="http://www.jwauctions.co.nz/upcomingauctions.html">http://www.jwauctions.co.nz/upcomingauctions.html</a>





### BE CAREFUL OF WHAT YOU CARRY WHEN FLYING - A REMINDER OF STRICT ANTI-**TERROR ENFORCEMENT.**

Teacher Arrested at Wellington Airport

A high school teacher was arrested today at Wellington International Airport as he attempted to board a flight while in possession of a ruler, a protractor, a compass, a slide-rule and a calculator.

At a press conference, Police Commissioner Andsue Coaster said he believes the man is a member of the notorious extremist Al-Gebra movement.

He did not identify the man, who has been charged under new terrorist regulations with carrying weapons of maths instruction.

'Al-Gebra is a problem for us', the commissioner said. 'They derive solutions by means and extremes, and sometimes go off on tangents in search of absolute values.' They use secret code names like "X" and "Y" and refer to themselves as "unknowns"; but we have determined that they belong to a common denominator of the axis of medieval with coordinates in every country. As the Greek philosopher Isosceles used to say, "There are three sides to every triangle."

When asked to comment on the arrest, the office of the Prime Minister stated, "If the gods had wanted us to have better weapons of math instruction, they would have given us more fingers and toes."

The Police Minister, Potatoe Williama, later told reporters he could not recall a more intelligent or profound statement by any Former Prime Minister, and stated, that as a follow up, they would be announcing an investigation as to whether the change of cookie by Air New Zealand from "Chocolate Chip" to "Shortbread", was racially motivated.

*There had to be more than one april foolds day story* 

### WHY NEW-TECH SEEM SO FAMILIAR:



### SOME NETS - FOR WHEN YOU ARE LOOKING FOR COMPANY

Sunday     08:00     3.750     Southern Net       09:00     3.755     Bch 65. Papakura.       16:00     7.125     SPAM Net (AM Mode)       19:00     3.755     Bch 65. Papakura.       20:00     3.710     Bch 65. Papakura.       20:00     3.710     Bch 42. Titahi Bay       21:30     3.595     VK2WI       Monday     19:30     3.757     Bch 12. Hamilton       20:00     3.640     CW Practice Net       updated     20:00     3.650     Br 80. Hibiscus Coast       updated     20:00     3.670     O.T.C (Old Timers Club)       Tuesday     09:00     7.096     Ex Post Office Techs       21:30     3.670     O.T.C (Old Timers Club)       Tuesday     09:00     3.661     Geek Net       20:00     3.661     Geek Net     20:00     3.645       20:00     3.645     Bch 02. Auckland     20:00     3.645       20:00     3.645     Bch 24. Bay of Islands     20:00     3.645       20:00     3.645     Bch	Day	Time (Local)	Freq (MHz)	Group
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21:00     1.850     160m Net _ Ron ZL4JMF       19:30     3.690     QRP ZL2BH       20:00     3.581     CW improvers Net       Wednesday     20:00     3.645     Bch 02. Auckland       20:00     3.645     Bch 84. Bay of Islands       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:30     3.696     ZL10A       20:00     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     QRP SSB Net       Friday     20:00     3.650       20:30     3.666     LF Net ZL2CA       20:00     3.650     WS.R.C.       20:30     3.650     Digital Modes Net       5aturday     10:30     2.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30	Tuesday	09:00	7.096	Ex Post Office Techs
19:30     3.690     QRP ZL2BH       20:00     3.581     CW improvers Net       Wednesday     20:00     3.660     Geek Net       20:00     3.645     Bch 02. Auckland       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       20:00     3.540     CW Practice Net       20:00     3.641     Bch 89. REG       20:00     3.640     CW Practice Net       20:00     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.650       20:30     3.650     W.S.R.C.       20:30     3.650     W.S.R.C.       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650		21:00	1.850	160m Net _ Ron ZL4JMF
20:00     3.581     CW improvers Net       Wednesday     20:00     3.660     Geek Net       20:00     3.645     Bch 02. Auckland       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH     Quitor       20:00     3.540     CW Practice Net     Quitor       20:00     3.615     Bch 89. REG     Quitor       20:00     3.666     LF Net ZL2CA     Quitor       20:30     3.666     LF Net ZL2CA     Quitor       20:30     3.650     W.S.R.C.     Quitor       20:30     3.650     W.S.R.C.     Quitor       20:30     3.650     W.S.R.C.     Quitor       20:30     3.650     W.S.R.C.     Quitor       20:30     3.650     Christian Fellowship     Quitor       20:30     3.650     Christian Fellowship     Quitor       20:00     3.760     Christian Fellowship		19:30	3.690	QRP ZL2BH
Wednesday     20:00     3.660     Geek Net       20:00     3.645     Bch 02. Auckland       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       20:00     3.650     W.R.S.C.       20:00     3.650     WS.R.C.       20:00     3.650     WS.R.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.600     Ch 62. Reefton/Buller       Daily or Other     07:30     3.696     ZL20A       20:30     3.760     Home Brew     17:30       17:30     3.760     Home Brew <td< td=""><td></td><td>20:00</td><td>3.581</td><td>CW improvers Net</td></td<>		20:00	3.581	CW improvers Net
Wednesday     20:00     3.660     Geek Net       20:00     3.645     Bch 02. Auckland       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.696     ZL10A       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       20:00     3.650     W.S.R.C.       20:30     3.650     W.S.R.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.666     ZL20A       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.660     CL20A       8aturday     10:30     3.6				
20:00     3.645     Bch 02. Auckland       20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C.       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.850       20:30     3.650     W.S.R.C.       20:30     3.560     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.600     Ch 62. Reefton/Buller       20:30     3.696     ZL2OA       20:30     3.730     ZL3RP <td>Wednesday</td> <td>20:00</td> <td>3.660</td> <td>Geek Net</td>	Wednesday	20:00	3.660	Geek Net
20:00     3.745     Bch 84. Bay of Islands       20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.666     LF Net ZL2CA       20:00     3.650     SPAM (AM Mode)       20:30     3.650     Ws.S.C.       20:00     3.650     Ws.S.C.       20:00     3.650     Ws.S.C.       20:30     3.650     Ws.S.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.600     Ch 62. Reefton/Buller       20:30     3.600     Ch 62. Reefton/Buller       20:30     3.696     ZL2OA       20:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers		20:00	3.645	Bch 02. Auckland
20:30     146.525     W.R.S.C       Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:30     3.690     ZL QRP SSB Net       7     7     7       20:30     3.650     W.S.R.C.       20:30     3.560     Digital Modes Net       20:30     3.560     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.600     Ch 62. Reefton/Buller       9:30     3.600     Ch 62. Reefton/Buller       08:30     3.730     ZL3RP       10:10     14.300     Pacific Seafarers       17:30     14.183     ANZA DX Net       18:00     7.115     VK708		20:00	3.745	Bch 84. Bay of Islands
Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       20:00     3.690     ZL QRP SSB Net       20:00     3.650     W.S.R.C.       20:30     3.650     W.S.R.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.660     Christian Fellowship       20:30     3.660     Christian Fellowship       20:00     3.760     ???       20:30     3.696     ZL2OA       20:30     3.690     Christian Fellowship       20:00     3.760     ???       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       15:00     14.300     Pacific Seafarers		20:30	146.525	W.R.S.C
Thursday     09:00     7.096     Ex Post Office Techs       19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:00     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       20:00     3.650     SPAM (AM Mode)       20:30     3.650     W.S.R.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:00     3.760     ???       20:30     3.600     Ch 62. Reefton/Buller       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.760     Home Brew       18:00     7.115     VK70B       19:30     3.720     ZL1MO <tr tbl=""></tr>				
19:30     3.690     QRP ZL2BH       20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.850       20:30     3.650     W.S.R.C.       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:30     3.650     Christian Fellowship       20:00     3.760     ??       20:30     3.696     ZL2OA       20:00     3.730     ZL3RP       20:00     3.730     ZL3RP       20:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.760     Hom	Thursday	09:00	7.096	Ex Post Office Techs
20:00     3.540     CW Practice Net       20:00     3.615     Bch 89. REG       20:30     3.696     ZL10A       20:00     3.690     ZL QRP SSB Net       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.850     SPAM (AM Mode)       20:30     3.650     W.S.R.C.     1000000000000000000000000000000000000		19:30	3.690	QRP ZL2BH
20:00     3.615     BCn 89. REG       20:30     3.696     ZL10A       20:30     3.666     LF Net ZL2CA       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.850     SPAM (AM Mode)       20:30     3.650     W.S.R.C.     20:30       20:30     3.650     Digital Modes Net       20:30     3.650     Christian Fellowship       Saturday     10:30     28.530     10-10 Down Under       20:30     3.660     Christian Fellowship       20:30     3.660     Ch 62. Reefton/Buller       20:30     3.696     ZL20A       20:30     3.696     ZL20A       20:30     3.696     ZL20A       20:00     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.760     Home Brew       17:30     3.760     Home Brew       17:30     3.720     ZLMO       18:30     3.720     ZLMO </td <td></td> <td>20:00</td> <td>3.540</td> <td>CW Practice Net</td>		20:00	3.540	CW Practice Net
20:30   3.696   2L10A     20:30   3.666   LF Net ZL2CA     20:00   3.690   ZL QRP SSB Net     Friday   20:00   3.850     20:30   3.650   W.S.R.C.     20:30   3.560   Digital Modes Net     20:30   3.650   Christian Fellowship     20:30   3.650   Christian Fellowship     19:30   3.650   Christian Fellowship     20:00   3.760   ???     20:00   3.760   ???     20:00   3.760   Christian Fellowship     20:30   3.696   ZL2OA     20:00   3.760   Home Brew     15:00   14.300   Pacific Seafarers     17:30   14.183   ANZA DX Net     17:30   14.183   ANZA DX Net     19:30   3.720   ZL1MO     18:30   3.720   ZL1MO     18:30   3.725   ZL2NI / ZL4RF     20:30   3.725   ZL2NI / ZL4RF     20:30   3.725   ZL2NI / ZL4RF		20:00	3.615	BCh 89. REG
20:30     3.666     LF Net ZLZCA       20:00     3.690     ZL QRP SSB Net       Friday     20:00     3.850     SPAM (AM Mode)       20:30     3.650     W.S.R.C.       20:30     3.560     Digital Modes Net       20:30     3.560     Digital Modes Net       20:30     3.650     Christian Fellowship       300     3.650     Christian Fellowship       20:30     3.660     Christian Fellowship       20:30     3.600     Ch 62. Reefton/Buller       20:30     3.600     Ch 62. Reefton/Buller       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       20:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.720     ZLIMO       18:00     7.115     VK70B       19:30     3.720     ZLIMO       18:30     3.766     ZL3RP       08:30/2		20:30	3.696	
Image: Price of the system     Image: Price of the system       Friday     20:00     3.850     SPAM (AM Mode)       20:30     3.650     W.S.R.C.       20:30     3.560     Digital Modes Net       Saturday     10:30     28.530     10-10 Down Under       Saturday     10:30     28.530     10-10 Down Under       19:30     3.650     Christian Fellowship       20:00     3.760     ???       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       Daily or Other     07:30     3.696     ZL3OA       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       19:30     3.720     ZL1MO       18:00     7.115     VK7OB       19:30     3.730     ZL3RP       08:30/20:00     3.730     ZL3RP       20:30     3.725 <td< td=""><td></td><td>20:30</td><td>3.666</td><td></td></td<>		20:30	3.666	
Friday   20:00   3.850   SPAM (AM Mode)     20:30   3.650   W.S.R.C.     20:30   3.560   Digital Modes Net     20:30   3.650   ID-10 Down Under     Saturday   10:30   28.530   10-10 Down Under     19:30   3.650   Christian Fellowship     20:00   3.760   ???     20:30   3.600   Ch 62. Reefton/Buller     Daily or Other   07:30   3.696   ZL2OA     08:30   3.730   ZL3RP     15:00   14.300   Pacific Seafarers     17:30   3.760   Home Brew     18:00   7.115   VK7OB     18:30   3.720   ZL1MO     18:30   3.730   ZL3RP     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     20:30   3.725   ZL2HN / ZL4RF     20:30   3.725   ZL2HN / ZL4RF		20:00	3.690	ZL QRP SSB Net
Principal   20:30   3:630   SPARE (AFR Product)     20:30   3:650   W.S.R.C.     20:30   3:560   Digital Modes Net     Saturday   10:30   28:530   10-10 Down Under     19:30   3:650   Christian Fellowship     20:00   3:760   ???     20:30   3:600   Ch 62. Reefton/Buller     Daily or Other   07:30   3:696   ZL2OA     08:30   3:730   ZL3RP     15:00   14:300   Pacific Seafarers     17:30   3:760   Home Brew     17:30   14:183   ANZA DX Net     18:00   7:115   VK70B     19:30   3:720   ZL1MO     18:30   3:766   ZL3RP     18:30   3:720   ZL1MO     18:30   3:720   ZL1MO     18:30   3:725   ZL3RP     20:30   3:725   ZL2HN / ZL4RF     20:30   3:725   ZL2HX / ZL4RF     21:00   3:677   Counties Net ZL2MA	Friday	20.00	2 950	SDAM (AM Modo)
20:30     3.630     W.S.K.C.       20:30     3.560     Digital Modes Net       Saturday     10:30     28.530     10-10 Down Under       19:30     3.650     Christian Fellowship       20:00     3.760     ???       20:30     3.696     ZL2OA       20:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       18:00     7.115     VK7OB       19:30     3.766     ZL3LE       08:30/20:00     3.730     ZLHN / ZL4RF       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA	ГПИАУ	20:00	2.650	WSBC
Saturday     10:30     28.530     10-10 Down Under       19:30     3.650     Christian Fellowship       20:00     3.760     ???       20:30     3.600     Ch 62. Reefton/Buller       Daily or Other     07:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.720     ZL1MO       18:00     7.115     VK7OB       19:30     3.730     ZL3RP       20:30     3.766     ZL2NA		20.30	2.000	W.S.R.C.
Saturday     10:30     28.530     10-10 Down Under       19:30     3.650     Christian Fellowship       20:00     3.760     ???       20:30     3.600     Ch 62. Reefton/Buller       Daily or Other     07:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     3.760     Home Brew       17:30     3.720     ZL1MO       18:00     7.115     VK7OB       18:30     3.766     ZL3RP       20:30     3.720     ZL1MO       18:30     3.720     ZL1MO       20:30     3.730     ZL3RP       20:30     3.725     ZL2NA		20.30	5.500	
Jatarday   10:30   20:30   10:10 Down onder     19:30   3.650   Christian Fellowship     20:00   3.760   ???     20:30   3.600   Ch 62. Reefton/Buller     Daily or Other   07:30   3.696   ZL2OA     08:30   3.730   ZL3RP     15:00   14.300   Pacific Seafarers     17:30   3.760   Home Brew     17:30   14.183   ANZA DX Net     18:00   7.115   VK7OB     19:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     12:00   3.766   ZL1MO	Saturday	10.30	28 530	10-10 Down Under
19:30   3.030   Christian renowship     20:00   3.760   ???     20:30   3.600   Ch 62. Reefton/Buller     Daily or Other   07:30   3.696   ZL2OA     08:30   3.730   ZL3RP     15:00   14.300   Pacific Seafarers     17:30   3.760   Home Brew     17:30   14.183   ANZA DX Net     18:00   7.115   VK7OB     19:30   3.720   ZL1MO     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     20:30   3.725   ZL1MO	Saturuay	19.30	3 650	Christian Fellowshin
20:30   3.600   Ch 62. Reefton/Buller     Daily or Other   07:30   3.696   ZL2OA     08:30   3.730   ZL3RP     15:00   14.300   Pacific Seafarers     17:30   3.760   Home Brew     17:30   14.183   ANZA DX Net     18:00   7.115   VK7OB     19:30   3.766   ZL3LE     08:30/20:00   3.730   ZL1MO     20:30   3.725   ZL1MN / ZL4RF     20:30   3.677   Counties Net ZL2MA		20:00	3 760	222
Daily or Other     07:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       18:00     7.115     VK7OB       19:30     3.766     ZL3LE       08:30/20:00     3.730     ZL1MO       20:30     3.725     ZL3RP		20:30	3.600	Ch 62 Reefton/Buller
Daily or Other     07:30     3.696     ZL2OA       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       18:00     7.115     VK7OB       19:30     3.766     ZL3LE       08:30/20:00     3.730     ZL3RP       20:30     3.725     ZL1M / ZL4RF       21:00     3.677     Counties Net ZL2MA		20.50	5.000	
Datify of Other     Diffe     Diffe     Diffe       08:30     3.730     ZL3RP       15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       18:00     7.115     VK7OB       19:30     3.766     ZL3RP       08:30/20:00     3.730     ZL1MO       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA	Daily or Other	07:30	3,696	7L20A
15:00     14.300     Pacific Seafarers       17:30     3.760     Home Brew       17:30     14.183     ANZA DX Net       18:00     7.115     VK7OB       19:30     3.766     ZL1MO       18:30     3.766     ZL3LE       08:30/20:00     3.730     ZL3RP       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA		08:30	3,730	71 3BP
17:30   3.760   Home Brew     17:30   14.183   ANZA DX Net     18:00   7.115   VK7OB     19:30   3.720   ZL1MO     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     20:30   3.725   ZL2HN / ZL4RF     21:00   3.677   Counties Net ZL2MA		15:00	14.300	Pacific Seafarers
17:30   14.183   ANZA DX Net     18:00   7.115   VK7OB     19:30   3.720   ZL1MO     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     20:30   3.725   ZL2HN / ZL4RF     21:00   3.677   Counties Net ZL2MA		17:30	3.760	Home Brew
18:00   7.115   VK7OB     19:30   3.720   ZL1MO     18:30   3.766   ZL3LE     08:30/20:00   3.730   ZL3RP     20:30   3.725   ZL2HN / ZL4RF     21:00   3.677   Counties Net ZL2MA		17:30	14.183	ANZA DX Net
19:30     3.720     ZL1MO       18:30     3.766     ZL3LE       08:30/20:00     3.730     ZL3RP       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA		18:00	7.115	VK70B
18:30     3.766     ZL3LE       08:30/20:00     3.730     ZL3RP       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA		19:30	3.720	ZL1MO
08:30/20:00     3.730     ZL3RP       20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA		18:30	3.766	ZL3LE
20:30     3.725     ZL2HN / ZL4RF       21:00     3.677     Counties Net ZL2MA		08:30/20:00	3.730	ZL3RP
21:00 3.677 Counties Net ZL2MA		20:30	3.725	ZL2HN / ZL4RF
		21:00	3.677	Counties Net ZL2MA

This is designed to be a living list, Please update whenever you are able:

Also: Calling Frequencies:	Daily	Sunset-Sunrise	3580 USB	NZ FSQCall
Courtesy of Murray ZL1BPU	Daily	Sunrise-Sunset	7105 USB	NZ FSQCall
	Daily	24/7	7104 USB	International FSQCall

I'm told the last of these sees some amazing DX, especially around sunset.

	Papakura Radio Club Inc.	Page 21	April 2021	
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#### Papakura Radio Club Inc. Branch 65 NZART Club Directory 2017 Wellington Park, 1 Great South Road. PO BOX 72-397 Papakura 2244 PHONE 09 296 5244 Westpac 03-0399-0019896-00 Club website: <u>http://www.qsl.net/zl1vk</u> Club email: zl1vk.club@gmail.com

Elected Officers				
President	ZL1NUX	Gavin Denby	Ph 09 299 3415	021 1046946
Vice President	ZL1BNQ	Richard Gamble	Ph 09 5371238	021 729270
Secretary	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
Treasurer	ZL1MR	David Wilkins	Ph 09 2999346	021 1857903
Committee	ZL1RJS	Rob Stokes	Ph 09 2961152	021 307005
	ZL1IRC	Ian Clifford	Ph	021 8248400
	ZL1ASN	Rolly Adams	Ph 09 2966107	021 0427760
	ZL1DK	David Karrasch	Ph 09 296 8264	021 560180
	ZL1RIC	Ricky Hodge		021 666421
AREC Section Leader	ZL1BNQ	<b>Richard Gamble</b>	Ph 09 5371238	021 729270
CD Liaison	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
Newsletter Editor	ZL1NUX	Gavin Denby	Ph 09 299 3415	021 459 192
Hall Custodian	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
Newsletter.	Contact: zl	lnux@outlook.com		

Our newsletter is published monthly and normally distributed just prior to the club meeting. Please forward articles etc to editor Wednesday 1 week prior to the general meeting. Do notify any change of address. Including E-Mail Address.

#### Meetings

Flocted Officers

General Meetings are held at the Club rooms on the 1st Wednesday of each month, starting at 7.30pm. Look at your calendar and mark these nights. The speaker follows the General Meeting.

Project Evenings are on the 4th Wednesday of each month.

Committee Meetings are held on 3rd Wednesday of each month at 7.30pm, unless advised.

Activity Nights are held on the 2nd Wednesday starting at 7.30pm.

AREC Meetings are on the 5th Wednesday night, also starting at 7.30pm **AGM:** Held in November

Subscription: Full membership and newsletter\$25.00Family Membership and newsletter\$40.00Bank Account number: 03-0399-0019896-00

Working Bees As required.

**Branch 65 21 Award:** For contacts with ZL1VK (5 Points) and 8 Papakura Radio Club Members (2 Points each) after January 2011. Total 21 Points. Cost \$5-00. Certified list and \$5-00 to Secretary, Papakura Radio Club. Address above.

#### ZL1VK Club Nets

146.900 MHz Sunday at 8.30am. Controller ZL1NUX, Gavin Denby. If the repeater is not available, listen 146.475 simplex.

3.755 MHz Sunday at 9.00am. Controller ZL1BNQ Richard Gamble. (Linked to 146.675 & 438.775)

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